

National Trail Data Standards



Interagency Trail Data Standards Meeting (ITDS)

Phoenix • June 24 -27, 2003

Meeting Notes

Participants:

BLM: Deb Salt, Bill Gibson, Bob Perkins

NPS: Helen Scully, Dick Mayle, Kay Threlkeld, David Duran

USFS: Jaime Schmidt

Agenda

1. Agency Updates
2. RecOneStop Update (Larry Warren, 6/24, 10 a.m.)
3. Review & Process Internal Agency Response Comments

Follow-up Items:

- GIS & Segmentation (coordinate with FGDC Roads Group)
 - NHT follow-up
 - NST follow-up
4. External & Partner Review (Strategy, Tasks & Assignments, Timeframes)
 5. Interagency Recommendations (Trails Class, Designed Use, Managed Use)
 6. Implementation Strategy (Milestones & Timeframes)

MEETING NOTES

Agency Updates

NPS Update:

- **Spatial Odyssey 2003:** National meeting 1st week of Dec in Orlando. May be a convenient place and time for Interagency Trails Data Standards (ITDS) Team to meet/work(?) Conference information available at: <http://nps.gov/gis/odyssey/>
- **Maximo:** Reviewed NPS/Washington Office draft screen captures of Maximo Specification Template, with Interagency Trail Standards incorporated (Dick Mayle). Per Maximo heading toward spatial capability. DOI reps meeting on interface of Maximo with spatial data in July (David Duran).
- **NPS Trails Working Group:** National NPS group working on development of standardized costing for NPS Trails. Consultant is Booz Allen Hamilton. Incorporating Trail Classes as fundamental basis for costing. Consultant has and is making attempt to look at what other agencies, including FS, are doing. (Helen Scully)
- **Internal Review:**
 - **GIS:** NPS GIS Committee held teleconference to discuss draft Interagency Trail Data Standards (ITDS). Positive comments and kudos on basic utility of standards, but need clarification/definition/development of GIS aspect. Also a question on scope: All trails? Too much at once? How to integrate with NPS Facilities

Management? (David)

- **National Trails:** Helen met with AT reps, who submitted comments afterward. AT concerned about implementation feasibility and effect on volunteers. Didn't hear much back from other National Trails at this point and will likely pick up their comments during external review.
- **Facilities Management** (trails within Parks): It appears that the standards will be incorporated through Maximo, and thereby incorporated in the Parks by default. (Helen)
- **NHT Corridor Concept:** Quick recap/explanation of NHT Corridor Concept. (Kay Threlkeld)

BLM Update: (Deb Salt)

- **Internal Review:** BLM held full 30-day review. Deb met with and presented Interagency Trails Data Standards powerpoint to BLM archeologists, historians and recreation managers in early June.
- **Coordination:** BLM Recreation & NLCS Divisions working more closely with Engineering on Trail Data Standards. BLM Engineering group offering to pull BLM Trails and data standards into the fold.
- **Training:** Trying to provide training on data standards, with mixed success for acceptance/understanding/buy-in. Clear training need still exists agency-wide on understanding concepts and terminology for data standards, data bases, data dictionaries, etc.
- **Federal Enterprise Architecture:** Multiple efforts at several levels that may impact one or another. Need to coordinate to the extent possible to maximize advances made (on applicable fronts) and minimize duplication or rework. (Bob Perkins)

FS Update: (Jaime Schmidt)

- **Internal Review:** National FS Trail Coordinator Jim Miller held a conference call with FS Regional Trail Coordinators to provide a briefing answered questions on the internal data standard review. During the call, it was reiterated that nearly all of the proposed data standards coincide with existing data attributes/definitions/standards in Infra Trails, TRACS and/or Infra Heritage, and that any pending items were already being considered for inclusion in those data modules or systems. As outlined in the conference call and subsequent e-mails, Jim referenced the 5/30 comment deadline and added that if no response was received from a region, that would be interpreted as a "thumbs up" response. Three written responses were received from FS Regional Trail Coordinators (which are/will be processed through the comment process), highlighting needed minor corrections/inconsistencies and/or items the Interagency Team is already working on (i.e. coordinating with GIS communities). The direct and interpreted response for the FS indicates an overall acceptance or approval of the draft Interagency Trail Data Standards by the FS Trails community.

RecML & RecOneStop (USFS•Larry Warren via speaker phone)

(Disclaimer: Jaime's cursory notes-- which may/may not be completely accurate-- taken during Larry's briefing.)

- The Justice Department is on version 3 of XML.
- The Interagency Trails Team's work tied to two related, but separate efforts:

1. **Interagency Data Standards:** Common terms and data elements (internally identified/controlled)
2. **XML:** Language translator/crosswalk for seamless sharing of data models and data elements (external input requested)
 - **XML Schema:** Data transfer protocol for applicable media.

Developed by Parks and Recreation Subcommittee of Government Without Boundaries, and proposed for adoption this week. Four major elements:

1. Facilities (constructed features)
2. Location (land area/"polygon")
3. Activities (can be associated with Facility or Location)

4. Event (can be associated with Facility or Location)

Rec.Gov is currently just sharing on "high-level elements" Facilities and Location data. Trails is not effected yet, as the detailed data sharing structure hasn't been developed. Rec.gov will be the repository for XML data that meets XML Schema. (Note: this doesn't mean all trail data—much will be agency-specific and housed in agency databases, warehouses, etc.)

XML encompasses descriptive attributes (i.e. location name, address, zip code, etc.).

GML (Geo Markup Language) encompasses the geo-location aspects. (GML struggling with transportation layer issues, which currently doesn't include trails)

The goal is to tie XML to GML. The technology exists, but XML and GML communities not in synch yet. This connection now being discussed.

- **RecMaps.gov:** Internal data model for consolidating recreation data. Six-month prototype/proof of concept scheduled to be ready by late August. Based on footprint of administrative unit. Users can search for activities and get GIS route. Ultimately, the goal is to be able to search to 1:24,000 scale for trails and trail activities. Larry working with agency counterparts: John Peterson (NPS) and NILES Group (BLM).
- **External Review of Interagency Trail Data Standards (ITDS)**

Conceptual outline of potential phases and how the draft ITDS fit into the foundation of the RecML picture:

1. **Internal Review of Draft ITDS:** USFS, BLM and NPS complete internal review and achieve interagency agreement in ITDS.
2. **Key Partner Review of ITDS:** Share ITDS with key partners so that are aware of what's been standardized and can/will be available between the three agencies; and to identify any additional data needs that they have. Goal isn't to seek their approval of ITDS, but to share that information and identify any additional needs they anticipate. No commitment will be made on the part of the agencies at this point to providing that info.

Tasks:

- a. Identify key partners
- b. Request key partner buy-in on ITDS
3. **Inter-Governmental Partnership Process:** Based on DOJ's model, conduct a horizontal and vertical review of data elements (including ITDS) with State Parks, National Association of Counties, and International Fish & Wildlife.
4. **OASIS Review:** Complete review facilitated by Organization for the Advancement of Structured Information Sharing (OASIS) to achieve standardized data specifications for the seamless sharing of data.

Revised Timeframes:

9/30/03: Adoption of RecML through general consensus (i.e. to extent possible)

States tie in with NGO's on data sharing crosswalk

NACIO (National Association of State Chief Information Officers) provide review and input

2005: Adoption RecML (version 1) by OASIS: 2,000-level Activities, Facilities, Location data

Review & Timing Strategy: Could run parallel review with State Park Directors review occurring concurrently with Trail NGO review (?)

- **Suggestions for External Review with Key Partners and/or Community of Interest:**
- 1. Don't focus on data element names, but types of info partners will want to share
- 2. Then the Interagency Trails Data Team can determine which of the ITDS elements will meet their needs

3. If none will, the new element can be added/identified as an optional data element (Larry recommends using inclusion/consensus approach during 1st cut, not excluding any suggestions).
4. RecMX v1: Version 1 would include common, basic elements identified for the trail route, pending resolution of GIS data element/segmentation aspects.
5. RecML v2: Version 2 could include the addition of overlapping GIS attributes and segments.
6. External review of the ITDS could be accomplished via a "Trails Room" created on RecML.org, or the XML Room at Rec.gov could be expanded to accommodate the ITDS review. [\(Larry will get back to the Interagency Trails Team on which option\)](#)
 - **Potential Funding:** Federal Highways may potentially have funding available for GPS/GIS of Trails in FY04.

Review & Process Internal Agency Response Comments (ITDS Team)

- **Reviewed and Discussed Kay• Written Edits** [\(Jaime incorporate Kay• edits into ITDS\)](#)
- **Trail Name:** Concern about trails with a local official name and also a higher level national name (i.e. NST, NHT). Can we cover with "Trails Name" + "National Trail Designation", or do we need to add a "Trail Alternate Name" (or alias) that is the secondary official name, if/when one exists? Also need to look at for NHT routes. [\(pending resolution by ITDS Team\)](#)
- Tie in with NHT Team on: LOVs for Type of Site and Visitor Facility Type, [\(JS add other NHT Team topics\)](#)
- **Reviewed and Discussed Interagency Internal Review Comments** (6/24-6/26)

(See ITDS Internal Review Comment Disposition document)

- **Designed & Managed Use:** Add example to Appendix B (per conversation with Bill). [\(Jaime\)](#)

External / "Community of Interest" Review (ITDS Team)

Strategy, Tasks & Assignments, Timeframes

Objectives of External/Community of Interest Review: The objectives of this review are to:

1. Share the draft National Interagency Trail Data Standards developed by NPS, USFS and BLM; and
2. Identify any suggestions (additions/deletions/edits) to the Interagency Core Questions and/or National Interagency Trail Data Standards at the national, regional or state level.

In addition to providing the basis for coordinated, consistent communication and data sharing between the NPS, BLM and USFS, these data standards would be incorporated into the base framework of RecML trail data for use in Rec.Gov.

Recommendations received that are outside the scope of the Interagency Trail Data Standards (that respond to Core Questions), will be forwarded to the RecOneStop team by the Federal Interagency Council on Trails for further consideration and/or incorporation in RecML.

~~**Objectives of "Community of Interest" Review:** The objective of this subsequent review would be to: *(Note: Concept subsequently dropped here and incorporated into External Review above)*~~

- ~~1. Identify additional trail information that the "community of interest" would like to see for NPS/BLM/USFS trails. *(Note: The intent*~~

is to become aware of additional data needs and establish a consistent format for data collection, while not necessarily committing at this point to the provision of the additional data by NPS, BLM or USFS.)

External/Community of Interest Review Audience:

(Note: This review does not include State Park Directors, as the States will be contacted via Larry Warren and the NASCIO review.)

- **Other Federal Agencies:** Federal Highways (Christopher Douwes/State Trail Administrator), National Fish & Wildlife Service (Sean Furniss), US Army Corps of Engineers, Bureau of Reclamation, Bureau of Indian Affairs
- **Key Partners:** NST/NHT Trail Associations (i.e. ATC, OCTA, North Country Trail Association, Santa Fe Trail Association, Ice Age Trail Association, National Pony Express Trail Association, Pacific Crest Trail Association, etc.), International Mountain Bicycling Association, American Hiking Society, American Trails, Rails-to-Trails Conservancy, Backcountry Horsemen, National Off-Highway Vehicle Conservation Council, Blue Ribbon Coalition, Tread Lightly, Leave No Trace, Western Trail Builders Association, North American Water Trails Association, United Four-Wheel Drive, American Motorcyclist Association, American Snowmobile Association, etc. ([Deb](#), [Helen](#), [Steve E](#), [Jim Miller complete list](#)•)
- **Promoters and Collaborators:** National Geographic, AAA, etc. ([Larry Warren complete](#)•/LI>

Associated Timelines (for reference and potential coordination)

8/21-25: Partnership Conference for National Trails

9/1: Ideal to have (draft and/or proposed) National Interagency Trail Data Standards for incorporation into RecML Schema.

9/30: State Park Directors approval of RecML schema ("high level):

- Location (land area)
- Facilities (constructed features)
- Activities (associated to facilities and/or land area)
- Event

9/30: Adoption of RecML through general consensus (via NASCIO: National Association of State Chief Information Officers)

11/17-21: Joint Ventures Conference internal/external, all agencies)

10/24/04: National Trail Symposium (Austin, TX)

Pre-Work Tasks:

1. Complete review of internal comments ([Team](#), 6/27)
 - a. Finish and clean-up response document, then to Team for review. ([Jaime](#), 7/3)
 - b. Draft Internal Review FAQ document (to be added as Appendix to standards). ([Bill](#), 7/10)

- c. NHT follow-up (Jaime, Kay & NHT Team, 7/??) Dry run external Sametime connection? (David)
2. Make arrangements with CAT (where to send comments, timeframes, etc.) (Helen, 7/7)
3. Complete reviewer list(s) (Deb, Helen, Steve E, Jim Miller, Larry Warren, 7/10)
4. Official cover letter from FICT (including abbreviated "How You Can Help" and abbreviated timetable) (Deb, 7/10)
5. Determine which website and how materials will be posted (what format, which documents?) (David tie in with Larry Warren by 7/11) Temporary staging area: www.nps.gov/gis/trails (David)
6. Appendix E: Data Model (Bob, 7/10)
7. Appendix G: Acronyms (Helen, 7/10)
8. Complete edits to standards (Jaime, 7/18)
9. Refine documentation for brevity and clarity (what is /isn• included, database or not, GIS & segmentation, overlap, etc.) (Jaime to Helen by 7/7. HS edit and to Deb by 7/10. Ready by 7/18)
10. Status-check conference call, info-share and surface any needed edits. (Team 7/21)
11. Comment Form (editable pdf). Pdf copy for hard-copy comments and/or electronic comments. (Note: Change title to Draft National Interagency Core Trail Data Standards, Check One: •/FONT>proposed•Edit dates. (Bob & Jaime edit by 7/23)
12. Format documentation package to pdf for web. (David, Bob, Jaime by 7/25)
13. Status-check conference call, info-share and surface any needed edits; Sametime or webcast? (Team 7/30)
14. **External Review Package available on website** (David, 8/4 [8/11?])
15. **Contact Reviewers:** E-mail cover letter to reviewers with website addresses (Deb, Jim M, Steve E, 8/4 [8/11?])
16. Web presentation / PowerPoint-- with minor edits (JS, 8/15)

Note: Post on web after Partnership Conference presentation. (David, 8/25)

17. Research and prep roll-out options for overview briefing(s):
 - a. 8/21-25: Presentation at Partnership Conference for National Trails: 90 minute overview with ppt, web address, handouts, Q&A• (i.e. data standards not database, existing databases, implementation, etc.) (Jaime, Kay, Helen, 8/21-25)
 - b. Research Webcast? (feasibility & cost: < 100 people \$2,000 - \$10,000; or \$2,500 for 2-hr webcast for 100 participants) (Bob, 7/7)
 - c. Research Sametime/concall projected on screen? (External capability through web browser? Record the session?) (David, 7/7)
 - d. Other?
16. **Comments due from reviewers by 9/30**
17. **Comments processed and summarized by CAT by 10/15.** (Weekly updates 8/18-9/30.)

Review Package Contents:

1. Official cover letter from FICT (including abbreviated "how you can help" and abbreviated timetable)
2. Copy of draft national trail data standards: (MS Word and pdf)
 - a. Table of Contents (with links to subsections)
 - b. Review Steps, How To, How You Can Help Us (formerly "Start Here" Tab 1)
 - c. Overview, Background, Context, Scope, "Our Story", Reference (formerly Reference Materials Tab 2) Add data standards/not database, GIS & segmentation
 - d. Core Questions Expanded
 - e. Trail Attributes
 - f. Draft LOVs
 - g. Appendix A: Trail Class
 - h. Appendix B: Designed and Managed Use
 - i. Appendix C: NHT Condition Categories
 - j. Appendix D: Core Questions and Attributes Considered but Not Incorporated ~~but Dropped~~
 - k. Appendix E: Logical Model
 - l. Appendix F: Interagency Internal Review Frequently Asked Questions
 - m. Appendix G: Acronyms
3. Comment Form (editable pdf)
4. Web presentation / PowerPoint-- with minor edits

Coordination with Geo-Spatial Community

Coordination needs identified in previous ITDS Team meetings and in the draft ITDS Internal Review materials.

- **FGDC:** Need to make sure that a rep from the Interagency Trails Team works with FGDC (Roads group in particular), to learn from their efforts and to ensure consistency as applicable. Common issues include segmentation, GIS attributes, etc. (*Note: All data will be accompanied by FGDC-compliant metadata.*)
- NPS GIS Coords: Participate in info-sharing conference call 8/12. ([David, Jaime, others? 8/12](#))
- Follow-up on contact establishment with FGDC Road group ([research key players & roles: Jaime to Team, 9/30](#))
- Establish Geo-Spatial (sub) Team ([Interagency Tr. Team reps + GIS reps, after 9/30](#))
 - **USGS Geo-Database Cartographic Schema (GeoSpatial OneStop & National Map):** USGS defining data structure for National Map themes/layers, including trails. Need to make sure that the Interagency Trails Team is involved in USGS•revisions/definitions for trails layer.
 - Stay current with DOI & USDA interpretations/initiatives/direction in terms of

Corporate Architecture and spatial data and data themes. (Bob, David, Larry Warren)

Interagency Recommendations (Trails Class, Designed Use, Managed Use)

ITDS Team agreement reached, based on the bulleted discussion below: Once Interagency Trail Standards are adopted, the management concepts of Trail Class, Designed Use, and Managed Use will likely be adopted along with the standards. As each agency then implements the standards, these concepts will be reviewed within each agency and incorporated as feasible and/or appropriate.

- **BLM:** Would prefer to let the concepts be accepted through the standards review process and then implemented as feasible/applicable. Would be most productive to let the value of these management concepts become evident to local managers so that they can decide to/not to adopt, rather than being told to.
- **NPS:** Ditto BLM (above). Important to get these concepts out to field folks for consideration sooner than the complete set of standards. If/when concepts incorporated into FMSS, would be viewed as •quired• NPS Trails Work Group using Trail Class as first sorting •lter•for draft trail costing (trail replacement, and trail assemblies for Timberline maintenance/deferred maintenance/construction costing).
- **USFS:** These concepts are currently corporately accepted and used as trail management tools.

Implementation Strategy (Milestones & Timeframes) (to be further defined/developed at future date by ITDS Team)

1. **Geo-Spatial:** Coordinate with GeoSpatial Reps
2. **Data Phases:** Identify tiers/phases of data attributes and interagency data population timeframes. (i.e. very basic = Trail Name, Trail Number, Trail Length; Phase 2 Info: County, State, • and/or identify •quired•vs optional. (Phases may/may not coincide with other Rec.Gov timeframes and requirements.). Interagency Trails Team do staff work on this, for consideration/revision/recommendation by FICT.
3. **User Support:** Define/provide interagency or agency-specific (?) user support for implementation of data standards.
4. **Maintenance/Update of Data Standards:** Create plan and process for interagency maintenance/update/custodian of the Interagency Trail Data Standards.
5. **Implementation & Data Access** (i.e. clearinghouse, databases, data-strings, etc•: Resolution pending Geo-spatial and Data Architecture initiatives/direction. Research possible solutions? (Bob, David)

Pending Items for Future Action/Resolution:

- **NST Work Group:** Tentatively scheduled for fall/winter (version 2). Agency reps identify NST agency reps for team.
- **Data Attribute:** "Threats" or protection status? (Deferred for subsequent resolution)
- **Executive-Level Infra Briefing?** David follow-up with NPS to determine if agency interested and/or will request briefing. Initial concept: high-level CIO briefing (» day?), followed up by tech-level detailed briefing/Q&A• (1 to 1 » days?). ([David](#))

Upcoming Concalls:

1. 7/21 3:30 Eastern (Status-check on pre-work tasks)
2. 7/30 3:30 Eastern (Status-check for prior to release of standards)
3. 8/22 (approx) Status check during Partnership Conference ([ITDS reps at conference](#))
4. 9/15 3:30 Eastern (Status-check on responses, Rec.Gov status, and schedule Oct/Nov

follow-up calls and/or meetings). Invite Larry Warren to provide Rec.Gov update. ([Helen](#))

US DOI

NPS

BLM

USDA

USFS

Rec1S

FirstGov

June 26, 2003